

KALENDARIVM

Astronomical, Meteorological,
and Chronological.

OR, AN

ALMANACK

For the Year of Christ;

M. D. C. L. X. I. X.

Being the first after the Leap-Year.

Calculated for the Meridian of LONDON,

By

JAMES BOWKER,

Astrophilo.

*Os homini sal'ime dedit, Cælumque videre
jussit, & erectos ad Sydera tollere vultus.*

LONDON, Printed by J. C. for the
Company of Stationers, 1669.



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The Vulgar Notes, and Moveable Feasts
this Year 1669. according to
T H E

English Account,				Forreign Account.
	17	The Golden Number	17	
	26	The Cycle of the Sun	26	
	6	The Dominical Letter	6	
	7	The Epact	27	
February 21		Shrove Sunday	3	March
April 11		Easter Day	21	April
May 16		Rogation Sunday	25	May
May 20		Ascension day	30	May
May 30		Whit Sunday	9	June
June 6		Trinity Sunday	16	June
November 28		Advent Sunday	8	December

Quatuor Annusdomidag; Or, The Ember Weeks

March 3. 5. 6. }	September 15. 17. 18.
June 2. 4. 5. }	December 15. 17. 18.

Times of Marriage prohibited.

From { The beginning of the year till *January 14.*
 { February 7. till *April. 19.*
 { May 16, till *June 6.*
 { November 28. till the end of the year.

THe bright Planet *Venus* is Oriental, and may be seen in the East before the Sun riseth, from the beginning of the year till the 23th. of June, all which time she is called the *Morning Star*. -- And from the 23th. of June to the years end, she is occidental and may be seen in the West after the Sun is set, all which time she is called the *Evening Star*.

The

Essoyn dayes, or dayes of Exception. Dayes of Returna Brevium. Dayes of Appearance.

<i>Ottob. Hilar.</i>	<i>Janu. 20</i>	21	22	23
<i>Quind. Hilar.</i>	<i>Janu. 27</i>	29	30	<i>Febru. 1</i>
<i>Craft. Purificat.</i>	<i>Febr. 3</i>	4	5	6
<i>Ottob. Purificat.</i>	<i>Febr. 10</i>	11	12	12

<i>Quind. Pasch.</i>	<i>April 26</i>	27	28	29
<i>Tres Pasch.</i>	<i>May 3</i>	4	5	6
<i>Mens. Pasch.</i>	<i>May 10</i>	11	12	13
<i>Quing. Pasch.</i>	<i>May 17</i>	18	19	21
<i>Craft. Ascens.</i>	<i>May 21</i>	22	27	24

<i>Craft. Trinit.</i>	<i>June 7</i>	8	9	10
<i>Ottob. Trinit.</i>	<i>June 14</i>	15	16	17
<i>Quind. Trinit.</i>	<i>June 21</i>	22	23	25
<i>Tres Trinit.</i>	<i>June 28</i>	29	30	<i>July 1</i>

<i>Tres. Mich.</i>	<i>Ottob. 20</i>	21	22	23
<i>Mens. Mich.</i>	<i>Ottob. 27</i>	27	29	30
<i>Craft. Anim.</i>	<i>Nov. 3</i>	4	5	6
<i>Craft. Mart.</i>	<i>Nov. 12</i>	13	15	15
<i>Ottob. Mart.</i>	<i>Nov. 19</i>	20	22	22
<i>Quind. Mart.</i>	<i>Nov. 26</i>	27	29	29

Every Return in each Term consists of 4 several dayes. The first hath a double signification: the one the day of Return, the other the day of Essoyn, for the Defendant in a personal Action, or the Tenant in a real Action to be Essoyned. — The second is the day of Exceptions, for the Plaintiff or Defendant to lay an Exception, if no Essoyn be cast that the Defendant shall not be Essoyned or Amerced. — The third is *Returna Brevium*, the day wherein the Sheriff must return the Writ. — The fourth is the day of Appearance, for Parties and Judges in the Court of *Common-Pleas*.

Note, I. If a *Capias*, *Exigent*, *Scirefacias*, *Distringas* be executed after the day of Essoyn by the Sheriff, or a Commission late upon after the Essoyn day, it is not warrantable. — II. That the first and last dayes of every Term, are the first and last dayes of Appearance. — III. That the *Exchequer* opens 8 dayes before any Term begins, except *Trinity Term*, before which it opens but 4 dayes.

A Table shewing the time of High Water in all the Ports below mentioned.

D.	M.	Hours and Minutes added.	Mi.	The Names of the Ports.	Ho.	Mi.
1	0	49		Queenborough, Southampton, Portsmouth,	0	0
1	1	38		Rochester, Malden, Blackrail,	0	45
2	2	26		Gravesend, Dover, Blackness, Silly,	1	30
3	3	15		Dundee, St. Andrews, Lisbon, Lucas,	2	15
4	4	3		London, Tinnmouth, Amsterdam, Rotterdam.	3	0
5	5	53		Barwick, Flushing, Flamborough,	3	45
6	6	41		Baltamoor, Corke, Severn, Callice,	4	30
7	7	30		Falmouth, Humber, New-Castle,	5	15
8	8	19		Plimouth, Hull, Lin, St. Davids,	6	0
9	9	8		Bristol, Start-point, Waterford,	6	45
10	10	56		Milford, Bridgewater, Landfend,	7	30
11	11	45		Portland, Hartflew, Dublin,	8	15
12	12	34		Pool, Isle of Man, Dunbar, Diepe,	9	0
13	1	23		Needles, Oford, South and N. Forelands,	9	45
14	2	11		Yarmouth, Dover, Harwich,	10	30
15	3	0		Rie, Winchelsey, Colthot,	11	15

The use of these Tide-Tables.

IN the Almanack following, you have the Age of the Moon, set (in the sixth Column) against every day in the year, which being known, seek the Moons age in this Table, and see what hours and minutes stand against it, those hours and minutes being added to the hours and minutes which stand against the name of the place you would know the time of High-water at, will give you the time.

Example.

If you would know what time it will be High-water at *Gravesend*, upon the second day of *January*, look in the Kalendar and against the second day of *January*, that the Moon is 10 days old: wherefore find 10 days in this Table under (C Age) and against it you shall find 8 h. 8 m. which being added to 1 h. 30 m. (the hours and minutes standing against *Gravesend*) the sum is 9 h. 38 m. at which time it will be High water at *Gravesend* on the second of *January* afternoon. But if the hours and minutes added together exceed 12 hours, you must cast away 12 hours, and the time of High water will remain. So on the first of *January*, the Moon is 9 days old, the hours and min. against 9 daies old are 7 h. 19 min. which added to 10 h. 30 m. (the hours and min. standing against *Yarmouth*) make 17 h. 49 m. from which take 12 h. and there remains, 5 h. 49 m. at which time, it will be high water at *Yarmouth* the first of *January*.

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A Table shewing what Day and Hour of the Day, in every Month, any of the Planets, ♄, ♃, ♀, or ☿, may be seen with (or near) the Moon, by which you may know them from the other fixed stars.

Months	♄		♃		♂		♀		☿	
	Day.	Ho.	Day.	Ho.	Day.	Ho.	Day.	Ho.	Day.	Ho.
January	22	2	1 Noon		24	10	19	5	10	9
February	18	6	19	6	12	9	18	1	10	11
March	18	8	15	11	13	7	19	10	22	8
April	14	6	22	7	11	5	18	8	18	5
May	12	2	20	3	0	2	18	10	18	3
June	8	8	17	10	18	11	18	4	10	5
July	5	3	15	5	7	7	18	1	9	8
August	1	10	11	9	15	2	17	11	15	14
	19	6								
Septemb.	15	1	8 Noon		12	9	17	7	15	7
October	21	7	6	1	11	5	17	10	16	11
Novemb.	19	2	2	10	9 Noon		16	9	14 Noon	
			29	3						
Decemb.	16	1	26	4	8	8	16	5	11	10

If you would know at what time in any Month any of the Planets will be with the Moon, look into this Table, and you have your desire.

Example.

If you would know when Saturn will be with the Moon, every Month look in the Column; which hath ♄ at the top, and against *January* you shall find 22 day 2 hours, denoting that upon the 22 day of *January* at 2 of the Clock Saturn will be with the Moon, and so of all the rest.

A Table shewing the length of the Day and Night, the Suns Place, his Right Ascension, his Declination, and Meridian Altitude, for every 10 day in each month.

The Months and every tenth day.		Length of Day.		Length of Night.		The Suns place.		The ☉ right ascensi.		The Suns Declina.		The Suns Merid. Altitude	
Month.	Da	H. M.	H. M.	H. M.	H. M.	D.	M.	H. M.	H. M.	D.	M.	D.	M.
January	1	7 56	16 4	21 59	39	20	9	21	S	43	6	31	
	10	8 20	15 40	1 10	20	13	19	58	8	26			
	20	8 48	15 12	11 38	22	54	1	26	10	57			
February	1	7 26	14 34	23 30	21	43	13	44	24	17			
	10	9 56	14 8	2 34	22	18	10	36	17	45			
	20	10 28	13 31	13 36	22	55	6	51	31	39			
March	1	11 14	13 46	2 35	3	9	3	3	34	35			
	10	11 54	13 6	0 31	0	3	0	N	12	38	31		
	20	12 32	11 28	10 21	0	38	4	7	42	39			
April	1	13 20	10 40	2 3	1	21	8	39	46	37			
	10	14 0	10 0	0 54	1	55	11	5	50	25			
	20	14 23	9 28	10 35	2	31	15	3	52	21			
May	1	15 16	8 44	2 10	3	15	18	8	56	15			
	10	15 40	8 20	2 5	3	55	20	12	58	35			
	20	16 8	7 51	2 4	3	21	59	60	22				
June	1	16 20	7 40	2 51	5	20	22	13	61	36			
	10	16 26	7 34	2 55	5	57	23	32	62	0			
	20	16 32	7 38	2 55	5	39	23	14	61	45			
July	1	16 8	7 54	2 57	7	4	23	7	60	49			
	10	15 44	8 16	2 59	8	5	20	39	59	14			
	20	15 20	8 40	2 58	8	40	18	27	57	4			
August	1	14 42	9 18	2 9	9	0	15	10	54	7			
	10	14 8	9 53	2 42	9	47	12	19	50	59			
	20	12 36	10 24	2 11	10	37	8	51	49	31			
September	1	12 46	11 14	2 1	11	20	4	22	43	26			
	10	12 14	12 46	2 49	11	41	0	51	39	31			
	20	11 22	13 28	2 39	12	27	3	3	35	38			
October	1	10 48	13 12	2 32	13	8	7	29	3	46			
	10	10 16	13 44	2 30	13	42	10	37	8	3			
	20	9 32	14 28	2 30	14	21	14	4	24	35			
November	1	8 52	15 8	2 35	15	8	17	41	21	22			
	10	8 24	15 36	2 41	15	45	19	59	18	39			
	20	8 0	16 08	2 51	16	28	21	5	16	43			
December	1	7 40	16 20	2 47	17	16	3	10	15	28			
	10	7 31	16 16	2 16	17	58	23	32	5	0			
	20	7 42	16 18	2 29	18	41	25	21	17	17			

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The following *ALMANACK* explained.

The first Column shews the day of the Month, the second the day of the week, **C** being Dominical, or Sunday Letter.

The third shews the Feasts both fixed and moveable, the beginning and end of the Terms, the Ember-Fasts, &c.

The fourth contains the Suns place every day at noon.

The fifth shews the place of the Moon (commonly called the Sign) every day at noon.

The sixth shews the age of Moon.

The seventh shews the Aspects that the Planets have to the Moon, as also one to another, with the Inclination or change of the Air deduced from them.

These are on one Page or side.

On the other side you have at the top thereof the Longitude or Places of the Planets ♄ ♃ ♀ ☿ ☿ and the Moons Latitude, for the 1, 6, 11, 16, 21, and 26 dayes of every month.

In the first Column you have the day of the Month.

In the second the time of the Suns rising and setting, (after a new Form) for that one Column (or row) of Minutes (which is that which stands in the middle) serves both for the hours of the Suns rising and his setting also.

Example.

If you would know (any day) at what time the Sun riseth and setteth as on the first of *January*, look in the Column of the Suns rising and setting, and against the first of *January* you shall find 8. 2. 4. shewing that the Sun rises 6 min. after 8, and sets 2 min. before 4 — Also against the 14 of *January* you shall find 7. 45. 5. intimating that the ☉ that day rises at 45 min. past 7 a Clock, and sets at 45 min. before 5 a Clock; and the day is then 8 hours and a half long.

In the third (which is the broad Column) you have Micro-Chronicon, or a brief Chronologie of memorable things.

In the last Column you have the time of High-water at London-Bridge for every day in the year.

Thus against the first of *January* you shall find 10 hours 12. min. which shews that it will be High-Water at London-Bridge 12 min. after 10 a Clock on the first day of *January*.

Full Moon the 7. day, 37 min. past 4 morning
 Last quarter the 15. day, 46. min. past 4 morning
 New Moon the 21. day, 49. min. past 9 at night.
 First quarter the 28. day, 21 min. past 7 at night.

1	a		21	13	59	8	19	9	Remis, close and
2	b	Ost. Stephen	13	1	11	2	1		f. ☿ ☾ at Noon.
3	c	Ost. John.	24	2		14	11		☿ ☾ ☾ ☿ ☾
4	d	Ost. Innocen	25	3		26	12		6. a. ☿ ☾ ☾ ☾ ☾ 10. a.
5	e	Ed. Con. depe.	26	4	☿	8	13		☿ ☾ ☾ ☾ ☾ 5. a. variable
6	f		27	6		20	14		☿ ☾ ☾ ☾ ☾ weather
7	g		28	7	☿	1			☿ ☾ ☾ ☾ ☾ with some snow
8	a	Lucian.	29	8		13	16		☿ ☾ ☾ ☾ ☾ 3. p. and sleet
9	b		☿	9		25	17		☿ ☾ ☾ ☾ ☾ at midnight.
10	c	1 after Epiph.	1	10	☿	7	18		☿ ☾ ☾ ☾ ☾ 10. a.
11	d	Hyginus	2	11		19	19		☿ ☾ ☾ ☾ ☾ 7. a. ☿ ☾
12	e		3	12	☿	1	20		☿ ☾ ☾ ☾ ☾ 7. p. All this
13	f	Hilary.	4	14		14	21		☿ ☾ ☾ ☾ ☾ 4. (p. part of
14	g		5	15		27	22		the Month to the
15	a	Maurus.	6	16	☿	10	23		☿ ☾ ☾ ☾ ☾ 9. p. 13 day
16	b	Marcellus.	7	17		23	24		will be very uncer-
17	c	1 S. after Epi.	8	18	☿	7	25		☿ ☾ ☾ ☾ ☾
18	d	Priaca.	9	19		22	26		☿ ☾ ☾ ☾ ☾ 1 p. rain and
19	e		10	20	☿	6	27		☿ ☾ ☾ ☾ ☾ 2 a.
20	f	Fabian.	11	21		21	28		☿ ☾ ☾ ☾ ☾ 9. p change-
21	g	Agnes.	12	21	☿	7			able with Rain, Snow
22	a	Vincent.	13	22		24	1		☿ ☾ ☾ ☾ ☾ 2 a. and some
23	b		14	23	☿	7	2		☿ ☾ ☾ ☾ ☾ ☿ ☾ ☾
24	c	3 S. after Epi.	15	24		21	3		☿ ☾ ☾ ☾ ☾ 10. p. Wind.
25	d		16	25	☿	6	4		☿ ☾ ☾ ☾ ☾ ☿ ☾ ☾ More
26	e		17	26		20	5		temperate, warm, and
27	f	Julian.	18	26	☿	3	6		dry weather.
28	g		19	27		16	7		☿ ☾ ☾ ☾ ☾ 1 p. very
29	a	Valerius.	20	28		28	8		☿ ☾ ☾ ☾ ☾ 6 p. fit for
30	b		21	29	☿	11	9		the Season.
31	c	4 S. after Epi.	22	29		23	10		☿ ☾ ☾ ☾ ☾ ☿ ☾ ☾

The
Planets
Places.

1 8

2 8

3 7

4 7

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16 7

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21 7

22 7

23 7

24 7

25 7

26 7

27 7

28 7

29 7

30 7

31 7

The Sun rises, minutes after

	♈		♉		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		Lat.		
	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	S.	A.	
The Planets Places.	1	13	18	1	11	3	15	10	2	4	29	17	0													16	
	6	13	53	1	2	3	5	16	39	5	17	46	4													29	
	11	14	25	1	17	16	52	22	39	12	43	4	D	17												17	
	16	15	4	1	D	17	20	41	28	41	20	4	M	44												44	
	21	15	40	1	20	24	30	4	17	44	27	43	4													54	
	26	16	16	1	30	28	16	10	48	5	40	2	D	13												13	
1	8	2	4	Hotham the Father (2d.) Hotham the												10	11										
2	8	0	4	Day 2 hours long (Son beheaded 25												11	0										
3	7	58	5														11	4									
4	7	57	5														12	36									
5	7	56	5														1	24									
6	7	55	5	An order for the Kings Trial,												21	12										
7	7	54	5														3	0									
8	7	53	5														3	48									
9	7	52	5	High Court of Justice procla.												21	4										
10	7	50	5	Bishop of Canterbury beheaded.												25	5										
11	7	49	5														6	12									
12	7	47	5	Barbadoes surrendered												12	7										
13	7	46	5														8	36									
14	7	45	5	Day 2 hours and a half long.												9	24										
15	7	42	5														10	11									
16	7	42	5	Scots invade Engl. the 2d time												26	11										
17	7	41	5	18) Venner & Hodgkins execut. in												11	48										
18	7	39	5	Colemanstr. Prichard in Cheap.												9	12										
19	7	38	5	K.C. brought from Winds. 10 S. Ja												21	1										
20	7	36	5	1. Before the H Court of Justice												21	2										
21	7	34	5	21) Second time												21	3										
22	7	32	5	23) The third time												21	3										
23	7	31	5	22) The Parliament dissolved												15	4										
24	7	30	5	Day 2 hours long												5	24										
25	7	28	5														6	11									
26	7	26	5	K Charles sentenced to death												21	7										
27	7	25	5	27) L. Munson, Sir H. Mildmay, and												8	30										
28	7	23	5	Mr. Wallop, drawn from the Tower												9	24										
29	7	20	5	30) K. Char. murdered 21 (so T. 3												10	12										
30	7	18	5	Cromwel, Ireton & Bradsh. Bodies												11	0										
31	7	16	5	hang'd at Tyburn												9	11										

February 1781

Full Moon the 5. day, 40 min. past 11 at night.
 Last quarter the 13. day, 3 min. past 4 afternoon.
 New Moon the 20. day, 57 min. past 8 in the morn.
 First quarter the 27 day, 43 min. past 12 at noon.

D.	W.	The Fixed and Moveable Feasts and Terms, &c.	Suns place		Moons place		The Lunar and Planetary Aspects.
			D.	M.	S.	D.	
1	d		23	30	5	11	Snow and Cold,
2	e		24	31	17	12	♂ ♀ ☾ 6 p.
3	f	Blaise	25	31	28	13	Rain.
4	g		26	32	10	14	Sharp Frosts,
5	a	Agatha	27	32	21	15	♂ ♀ ☾ 2 a. ♂ ♀ ☾ 1 p.
6	b		28	33	4	16	☐ ♀ ☾ 2 a. and dry
7	c		29	33	16	17	weather, for several
8	d		30	34	29	18	♂ ♀ ☾ 7 a. dayes
9	e	Apollonia	1	34	11	19	Remiss and more
10	f	Scholastica	2	34	24	20	☐ ♀ ☾ 2 a. and dry
11	g		3	35	7	21	☐ ♀ ☾ 2 a. and dry
12	a		4	35	20	22	temperate in resp: &
13	b		5	35	3	23	☐ ♀ ☾ 8 p. obine
14	c		6	36	17	24	Valentine.
15	d		7	36	1	25	Cold but variable.
16	e		8	36	15	26	☐ ♀ ☾ 10. a.
17	f		9	36	0	27	Snow
18	g	Simeon	10	36	15	28	♂ ♀ ☾ 6 p. ♂ ♀ ☾ 11 a.
19	a		11	36	0	29	☐ ♀ ☾ 5 p. and
20	b		12	36	15	30	♂ ♀ ☾ 11 p. Rain
21	c		13	36	29	1	and dispersed clouds
22	d	Peters Chair	14	36	14	2	♂ ♀ ☾ 9. p.
23	e	Shrove-Tuesd	15	36	28	3	with Rain.
24	f		16	36	11	4	☐ ♀ ☾ 10 p. Sleer
25	g		17	36	24	5	and such like
26	a		18	36	7	6	♂ ♀ ☾ 6. a. moist
27	b		19	36	19	7	Weather
28	c		20	35	1	8	☐ ♀ ☾ 5. p.

The
Planets
places.

Time
the S
R. ☉

1 7 15
2 7 14
3 7 13
4 7 11
5 7 10
6 7 8
7 6
8 7 4
9 7 2
10 7 0
11 6 59
12 6 57
13 6 55
14 6 53
15 6 51
16 6 49
17 6 45
18 6 43
19 6 40
20 6 38
21 6 36
22 6 34
23 6 32
24 6 30
25 6 26
26 6 26
27 6 24
28 6 22

	h			4		σ		γ		♀		C		Late
	D.	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	S.	P.	
The Planets places.	1	16	59	1	11	47	1	γ	48	18	13	4	5	37
	6	17	35	2		7	5	34	24	12	24	2	D	4
	11	18	10	2	3		10	21	0	18	3	X	29	0
	16	18	45	2	55		13	59	6	24	12	59	M	21
	21	19	20	3	32		7	41	12	31	22	41	D	29
	26	19	53	4	8		11	22	18	39	1	γ	7	2

Time or Chronological Notes or Memorable things
the Suns with the day of the Month when, and
R. ☉ Ger. years since they happened.

1	7	15	5	Day 6 hours and a half long	11	48
2	7	14	5	1) Kings body removed to Sr. Jam.	21	12
3	7	13	5	G. Monck marched into London	10	1
4	7	11	5		2	11
5	7	10	5		3	0
6	7	8	5	House of Lords voted useless	28	3
7	7	6	5	Kingly Office useless	21	4
8	7	4	5	G. Monck pull'd down the Gates, &c	5	24
9	7	2	5	(quartered in Lond.	10	6
10	7	0	5	Day 10 hours long	7	0
11	6	59	6	G. Monck received by the City	10	7
12	6	57	6		8	36
13	6	55	6	A new Ramp for Coyn	21	9
14	6	53	6		10	12
15	6	51	6	Mr. Beaumont executed	21	11
16	6	49	6	K. Ch. the II. proclaimed in Ireland	21	11
17	6	45	6	Day 10 hours and a half long	12	36
18	6	43	6	17) K. Ch. Prisoner to Holmby	23	1
19	6	40	6	18) A Sea-fight between the English	2	12
20	6	38	6	(and the Dutch	17	3
21	6	36	6	The sectu. M. brought in by G. M.	9	3
22	6	34	6	21) Warwick cashiered	21	4
23	6	32	6	The Queen imbarqued at Dover	23	5
24	6	30	6	Day 10 hours long	6	12
25	6	26	6		7	0
26	6	26	6		7	48
27	6	24	6		3	36
28	6	22	6		9	24

March

- The
Planets
places.**

1	6 20
2	6 18
3	6 16
4	6 13
5	6 10
6	6 8
7	6 6
8	6 4
9	6 1
10	6 0
11	5 587
12	5 567
13	5 547
14	5 527
15	5 507
16	5 487
17	5 467
18	5 447
19	5 437
20	5 417
21	5 397
22	5 377
23	5 367
24	5 357
25	5 347
26	5 327
27	5 307
28	5 287
29	5 267
30	5 237
31	5 217

March.	♂		♂		♂		♂		♂		C. Lat.	
	D.	M.	D.	M.	D.	M.	D.	M.	D.	M.	S.	A.
The Planets places.	1	20 13	4 11 32	23 7 34	22 19	7 21	4	34				
	6	20 45	5 14	27 14	18 17	14 39	4	D 21				
	11	21 16	5 59	0 8 50	4 35	19 27	0	M 23				
	16	21 46	6 49	4 27	10 41	21 13	5	1				
	21	22 13	7 39	8 2	16 50	20 19	2	D 49				
	26	22 4	8 31	11 37	22 58	16 50	2	S 52				

1	6	20	6									10	12		
2	6	18	6									25	11	0	
3	6	16	6										11	48	
4	6	13	6									19	12	36	
5	6	10	6										1	24	
6	6	8	6									21	2	12	
7	6	6	6										3	0	
8	6	4	6										3	48	
9	6	1	6									21	4	36	
10	6	0	6										5	24	
11	5	58	7										6	12	
12	5	56	7										7	34	
13	5	54	7										8	36	
14	5	52	7										9	24	
15	5	50	7										10	12	
16	5	48	7									10	11	0	
17	5	46	7										11	48	
18	5	44	7										12	36	
19	5	43	7										1	24	
20	5	41	7									15	2	12	
21	5	39	7									21	3	0	
22	5	37	7										3	48	
23	5	36	7										4	36	
24	5	35	7										5	24	
25	5	34	7										6	12	
26	5	32	7										7	0	
27	5	30	7										7	48	
28	5	28	7										8	36	
29	5	26	7									18	9	24	
30	5	23	7										10	12	
31	5	21	7										1	0	

The Scots cross Tyne

Day 11 June 1601 an half long

Sir Henry Hide beheaded

L. Capel and Sir J. Owen sentenced

L. Capel, D. Ham. E. Holl. beheaded

10) Bish. Votes in Parl. taken away

An insurrection at Salisbury and other parts dispersed, C. Penruddock, C. Jo. C. Grove, &c. taken

Parl. dissolved, another summoned

Day 28 June 1601 an half long

A great Fire in Thredneedlestreet.

Pontefract surrendered

Brownbushel beheaded

April herb. XXX. dayes.

- Full Moon the 6. day, 52 min. past 6 at night.
- Last quarter the 13. day, 17 min. past 7 morning.
- New Moon the 20 day, 24 min. past 5 in the morn.
- First quarter the 28. day, 6 min. past 2 in the morn.

1	B	Theodore	22	Y	8	27	11	A very temperate
2	B		23	7	17	9	12	☐ ♀ ☾ 2 p. Scaten,
3	B		24	5		21	13	and good Spring-
4	B		25	4	☾	4	14	☐ ☾ ☾ (at Noon) ing
5	B		26	2		15	15	☐ ☾ ☾ 1 a. wearber
6	B	Sixtus	27	0		29	16	☐ ☾ ☾ Rain, and sodain
7	B		27	59	☾	13	17	Showers.
8	B		28	58		27	18	☐ ☾ ☾ 1 a. Warme
9	B		29	56	☾	10	19	☐ ☾ ☾ 1 a. Warme
10	B		30	54		24	20	☐ ☾ ☾ 8 a. very
11	B		1	52	☾	8	21	☐ ☾ ☾ 8. ☐ ☾ ☾ 3 p.
12	B		2	51		22	22	variable, stormy
13	B		3	49	☾	6	23	☐ ☾ ☾ Winds
14	B		4	47		20	24	☐ ☾ ☾ 6 p. ☐ ☾ ☾ 8 p.
15	B	Jubilate	5	45	☾	5	25	☐ ☾ ☾ 2 a. and
16	B		6	43		19	26	Cold air.
17	B	Anicetus	7	41	☾	2	27	☐ ☾ ☾ 3 p. ☐ ☾ ☾ 5 a.
18	B		8	39		16	28	Cold rains.
19	B		9	37	☾	1	29	☐ ☾ ☾ incon-
20	B		10	35		14	30	☐ ☾ ☾
21	B		11	33		27	1	☐ ☾ ☾ 5 p. warmer
22	B	Cantare	12	31	☾	10	2	☐ ☾ ☾ 7 p. and
23	B	St. George	13	29		23	3	more temperate
24	B		14	27	☾	5	4	☐ ☾ ☾ 4 p.
25	B		15	25		17	5	☐ ☾ ☾ 2 p.
26	B		16	23		29	6	☐ ☾ ☾
27	B		17	21	☾	11	7	Good weather to the
28	B		18	19		23	8	months end.
29	B		19	16	☾	5	9	☐ ☾ ☾ 1 p. ☐ ☾ ☾ 1 p.
30	B		20	14		17	10	☐ ☾ ☾ 10 a. (non)

April	D.	b	4	♂	♀	♂	♀	♂	♀	Lat.	D.			
	D.	M.	D.	M.	D.	M.	D.	M.	S.					
	1	13	11	19	15	8	52	0	7	15	12	36	5	
The	6	23	35	10	37	19	25	6	27	10	26	1		
Planets	11	13	55	11	36	22	55	12	35	10	13	4	M	24
Places,	16	24	15	12	37	26	25	18	46	11	57	4	D	3
	21	24	32	13	41	29	52	24	50	15	24	1	S	28
	26	14	47	14	46	3	11	20	8	57	10	16	5	
1	5	10	7								12		48	
2	5	18	7								12		36	
3	5	16	7								1		24	
4	5	14	7								14	2	12	
5	5	12	7								14	3		
6	5	10	7								3		42	
7	5	7	7								4		36	
8	5	4	7								21	5	24	
9	5	2	7								6		12	
10	5	0	7								7		24	
11	4	58	8								9	8	36	
12	4	57	8								9		24	
13	4	55	8								19	10	12	
14	4	53	8								11		0	
15	4	52	8								27	11	48	
16	4	50	8								12		36	
17	4	48	8								1		24	
18	4	46	8								2		12	
19	4	44	8								7	3	0	
20	4	42	8								24	3	48	
21	4	40	8								4		36	
22	4	39	8								9	5	24	
23	4	37	8								5	6	12	
24	4	35	8								9	7	12	
25	4	33	8								21	7	24	
26	4	31	8								8		36	
27	4	29	8								9		12	
28	4	27	8								23	10	0	
29	4	25	8								16	11	0	
30	4	23	8								11		48	

May hath XXXI. dayes.

- Full Moon the 5. day, at 6 at night.
- Last quarter the 18. day, 35 min. afternoon
- New Moon the 19. day, 17 min. past 5 at night.
- First quarter the 27. day, 31 min past 7 at night

1		21	8	12	29	11	Dry and plea-
2	b	3	Sun. after Ea.	12	9	12	11 sane weather.
3	b	Inven. Cro.	13	7	25	13	8 p. Mon
4	c		14	5	31	14	5 p. remiss
5	f	Godard	35	2	22	15	h 6p.
6	g	John Port. lar.	26	0	6	16	8 p. and
7	a		26	58	20	17	7 a. some
8	b	Stanislaus	27	55	4	18	Showers.
9		4 Sun. after Ea	28	53	19	19	
10	d		29	50	3	20	8 p. cold
11	c	Anthony	II	48	17	21	4 p. cold
12	f		1	4	13	22	2 a. and
13	g	Servatius	2	43	15	23	6 p. miks
14	a		3	40	29	24	Cold rain.
15	b	Sophia	4	37	Y	13	25 Missing and
16			5	35	26	26	Small
17	d		6	32	8	27	showers.
18	e		7	30	21	28	5 p. 8 3 p.
19	f	St. Dunstan	8	27	II	6	with
20	g		9	24	18	1	3 p. some
21	a		10	22	5	2	Wind
22	b	Julian Virg.	11	19	13	3	and
23			12	16	25	4	Thunder.
24	d		13	13	7	5	
25	c		14	11	19	6	Remiss and
26	f	St. Augustine	15	8	17	7	1 a. Cold
27	g		16	5	13	8	for some dayes,
28	a	Germane	17	2	25	9	4.3. and
29	b		18	0	7	10	after
30			19	57	20	11	wind and Rain.
31	d		20	54	3	12	

The
Planets
places

4	22
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4	51
4	50
4	50

The Sun rises minutes after

	D	h	m.d.	u	m.d.	♂	m.d.	♀	m.d.	♀	m.S.	D					
The Planets places	I	25	0	15	II	30	6	II	46	7	0	42	6	V	18	3	22
	6	25	II	16	35	10	II	13	12	3	0	23	2	M	12		
	II	25	20	8	5	13	35	19	20	II	26	5	D	13			
	16	25	25	19	13	16	59	25	28	20	27	I	S	8			
	21	25	R	29	20	20	20	21	I	II	35	0	II	23	3	D	58
	26	25		29	21	28	23	42	7	42	11	14					53
4	22	8	Montroff: taken										19	II	48		
4	21	8	Oxford beleagured,										23	12	36		
4	20	8											I	24			
4	19	8											2	12			
4	17	8	King Charles went to the Scots Army,										23	3	0		
4	15	8											3	48			
4	13	8											4	36			
4	12	8	Parliament began,										8	5	24		
4	11	8											6	12			
4	0	8											7	0			
4	9	8											7	48			
4	7	8	Earl of Stafford beheaded,										29	8	36		
4	6	8											9	24			
4	5	8	Q. Kather. arriv'd at Portsmouth,										7	10	12		
4	3	8	The King came to the Hague,										9	11	0		
4	2	8											12	36			
4	1	8											I	24			
4	59	8											I	12			
3	58	9	England a free State,										20	3	0		
3	56	9											3	48			
3	55	9	Montroffs murthered										19	4	36		
3	54	9	21) King and Queen married at Portl										5	24			
3	53	9	mouth										7	6	12		
3	53	9	Kenish Insurrection,										21	7	0		
3	52	9	The King, Duke of York, and the Duke of										7	48			
3	52	9	Glocester at Dover,										9	8	36		
3	52	9	Marquis Argile beheaded at Eden,										8	9	24		
3	51	9											10	12			
3	51	9											11	0			
3	50	9	King at Whitehall, 9. Nat. Car. II. May 39										11	48			
3	50	9	1630.										39	12	36		

The
Planets
places

1	3	50
2	3	49
3	3	49
4	3	49
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8	3	47
9	3	47
10	3	47
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16	3	48
17	3	48
18	3	49
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21	3	50
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24	3	51
25	3	52
26	3	52
27	3	53
28	3	54
29	3	55
30	3	56

[illegible]

- ☾ Full Moon the 3 day, 40 min. past 10 before noon.
 ☾ Last Quarter 10 day, 42 min. past 1 in morn.
 ☉ New Moon the 17 day, 29 min. past 9 at night.
 ☾ First Quarter the 25 day, 25 min. past 11 night.

1	g	John Baptist	19	25	7	22	14	☉ ☿ at midnight
2	*	Victr. Mary	20	22	☿	7	15	Ho. and dry
3	b	Martin	21	19		22	☉ ☿ 6 a. ☉ ☿ 4 p	
4	z	4 Sun. aft. Tri	22	1	☿	7	17	
5	d		23	13		22	18	☉ ☿ 3 p. ☉ ☿ 9 a
6		Peter	24	11	☿	7	19	more cool and
7	f		25	8		22	20	showrs.
8	g	Grimbald	26	5	☿	6	21	☉ ☿ 4 a.
9	e		27	2		20	22	☉ ☿ sp
10	b	7. Brethren	28	59	☿	3	23	☉ ☿ 11 a. rain
11		5 Sun. aft. Tri.	28	57		16	24	
12			29	54		29	25	☉ ☿ 2 a. ☉ ☿ 5 a
13	v			51	☿	12	26	☉ ☿ an
14	f		1	48		24	27	cool with
15	g	Swithln	2	46	☿	6	28	☉ ☿ 5 a. gentle
16	a		3	43		18	29	Gues of winds
17	b	Alexius	4	40	☿	0	☉	☉ ☿ 7 a. and
18		6 Su. af. Trin.	5	38		12	1	☉ ☿ 1 p. some
19	a		6	35		24	2	☉ ☿ 10 a. ☉ ☿ 8 p.
20	e	Margaret	7	32	☿	6	3	showrs.
21	f		8	30		18	4	
22	g	M. Magdalen	9	27		29	5	☉ ☿ 8 p.
23	a		10	25	☿	12	6	D y weather
24	b		11	22		24	7	and hot
25			12	20	☿	7	8	☉ ☿ 4 a.
26	d		13	17		20	9	☉ ☿ 6 p.
27	e	Martha	14	15	☿	3	10	(☉ ☿ at mid.
28	f		15	12		17	11	
29	g	Beatrice	16	10	☿	1	12	☉ ☿ 8 p.
30	a		17	7		15	13	misling rains
31	b	German	18	5		29	14	☉ ☿ 10 p

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	D		♂		♀		♀		M		A	
	d.	m.d.	m.d.	m.d.	m.d.	m.d.	m.d.	m.d.	m.d.	m.d.	m.d.	m.d.
	1	2	3	4	5	6	7	8	9	10	11	12
The	5	27	10	10	5	45	20	42	28	5	21	54
June	12	23	5	6	50	3	57	4	13	25	4	56
July	16	3	30	2	52	27	11	10	24	2	30	46
Aug	21	23	9	5	55	6	23	16	33	28	13	47
Sept	26	23	47	4	25	3	37	22	43	26	2	18
Oct	1	3	5	9	1	10	4	10	4	10	2	12
Nov	2	3	57	9	Marston-moor Fagin,				25	3	0	
Dec	3	3	58	9						3	48	
Jan	3	3	59	9	5) Tomkins and Chaliner executed,				16	4	36	
Feb	5	4	0	3						5	24	
Mar	6	4	2	8	C. of Justice in Westminster-hall,				15	5	12	
Apr	7	4	3	8	6) Love sentenced,				18	7	0	
May	8	4	5	8						7	48	
June	9	4	6	8						8	36	
July	10	4	8	8	Gerard and Vowel executed, and Do				9	24		
Aug	11	4	9	8	Pantolton Sa. beheaded,				13	10	12	
Sept	12	4	11	8	Earl of Essex made General,				27	11	0	
Oct	13	4	12	8	G. Monk created Duke, of Albermarle,				11	48		
Nov	14	4	13	8						12	36	
Dec	15	4	14	8						1	24	
Jan	16	4	15	8						2	12	
Feb	17	4	16	8	Act for new Money,				21	3	0	
Mar	18	4	17	8						3	48	
Apr	19	4	18	8						4	36	
May	20	4	20	8						5	24	
June	21	4	21	8	Pontefract surrendered,				15	6	12	
July	22	4	23	8						7	0	
Aug	23	4	25	8	Worcester surrendered,				23	7	48	
Sept	24	4	27	8						8	36	
Oct	25	4	29	8	Tilbury Camp,				8	9	24	
Nov	26	4	30	8						10	12	
Dec	27	4	32	8	Bristol taken by Prince Rupert,				25	11	0	
Jan	28	4	34	8						11	48	
Feb	29	4	35	8	A bloody Sea fight between the English and					12	36	
Mar	30	4	37	8	The Dutch in which there Admiral Van					1	24	
Apr	31	4	38	8	Treaty of London,					16	2	12

The
Plan
place

- Full moon the 1 day, 44 min. past 5 at night.
 First Quarter the 8 day, 38 min. past 11 before noon.
 New Moon the 16 day, 37 min. past 1 in the afternoon.
 First Quarter the 24 day, 58 min. past 9 morning.
 Full Moon the 31 day, 15 min. past 3 morning.

[illegible]

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[illegible]

September hath XXV. dayes.

- ☾ Last Quarter the 7 day, 21 min. past 1 morn.
- ☾ New Moon the 15 day, 31 min. past 5. morn.
- ☾ First Quarter the 22 day, 52 min. past 6 at night
- ☾ Full M on the 29 day, 41 min. past 4 afternoon.

1	f		19	I	V	9	16	☐	♂	2. p.
2	B		20	o		24	17		wind and	
3	a		20	53	♂	8	18			thun-
4	b	Cuthbert	21	57		21	19	☐	♂	9. a. der.
5		13 Su. aft. Tri.	22	55	II	5	20	☐	♂	2. a. hot
6	D		23	54		17	21	☐	♀	11. a. and
7	C	Enurchus	24	53		29	22			dry.
8	f	Nat. Mary	25	52	♂	12	23	♂	♂	at noon.
9	g		26	50		24	24			moist, remisse,
10	h	Sosthenes	27	49	♂	6	25			and rain.
11	b		28	48		18	26	♂	♂	4. p.
12	D	14 Su. aft. Tri.	29	47		29	27	♂	♂	9. p.
13	D			46	☐	11	28			wind and rain
14	C	Holy Cross	1	45		23	29			
15	f		2	44	☐	6				♂ ♀ 7. a.
16	g		3	43		18	1			
17	a	Lambert	4	42	m	12		♂	♀	7. a.
18	b		5	41		13	3	☐	♂	11. p.
19	D	15 Su. af. Trin.	6	40		26	4			Fair and dry
20	D		7	39	♂	9	5	☐	♂	at noon;
21	C		8	38		22	6			thun-
22	f		9	37	☐	6	7	♂	♂	8. p. der
23	g	Tecla Virg.	10	37		20	8	☐	♀	7. a. and
24	a	Rupertus	11	36	☐	49		☐	♀	5. p. violen
25	b	Cyprian.	12	35		18	10			♂ ♀ 1. a.
26	D	16 Sun. af. Tri	13	35	☐	5	11			showers.
27	D		14	34		18	12	♂	♂	7. a.
28	f		15	33	V	3	13			Hail
29	f		16	32		17	14	☐	♂	7. a.
30	g	Hierome	17	32	♂	2		♂	♀	5. a.

The Planes place

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September	D.	h.	m.	d.	♂	m.	d.	♀	m.	d.	♀	M.	M.	D.
The Planets places	I	20	9	11	27	27	8	24	7	39	2	S	4	
	6	19	51	12	9	0	21	14	34	16	56	3	42	
	11	19	36	12	48	3	29	20	54	26	13	4D	57	
	16	19	22	13	22	6	38	26	43	5	10	I	15	
	21	19	11	13	54	9	47	3	m	4	13	45	M	
	26	19	1	24	21	12	55	9	14	21	57	4	D23	
1	5	37	7	A. Char. I. set up his Standard at York,								29	3	48
2	5	40	7	13200 Houses burnt in London								34	3	36
3	5	42	7	Warcester fight 18. O. Cromwel died								11	5	24
4	5	44	7	Excester taken by the King								16	6	12
5	5	45	7									7		0
6	5	47	7	5) The French Fleet beat by the English,								17	7	48
7	5	49	7									8		36
8	5	50	7									9		24
9	5	51	7									10		12
10	5	53	7									11		0
11	5	56	7	Basing house relieved,								25	11	48
12	5	57	7	11) Bristol surrendered,								24	12	36
13	6	0	6									1		24
14	6	2	6	13) Henry Duke of Gloucester dyed,								9	2	12
15	6	4	6	13) Scots Prisoners brought to London,								18	3	0
16	6	6	6									3		48
17	6	8	6									4		36
18	6	10	6	Treaty at the Isle of Wight began								21	5	24
19	6	12	6									6		12
20	6	14	6	Newbery first Battel,								26	7	0
21	6	16	6									7		48
22	6	18	6									8		36
23	6	20	6									9		24
24	6	22	6									10		12
25	6	24	6									11		0
26	6	26	6									11		48
27	6	28	6									12		36
28	6	30	6									1		24
29	6	32	6									2		12
30	6	34	6									3		0

- ☾ Last Quarter the 6 day, 32 min. past 6 at night.
 ● New Moon the 14 day, 24 min. past 9 at night.
 ☽ First Quarter the 22 day, 502 min. past 2 morn.
 ☾ Full Moon the 28 day, 74 min. past 10 at night.

1	a	Remigius	18	32	☾	16	16	☐ h ☾ 5. p. close	16	36
2	b		19	32		29	17	cold and	16	38
3		17 Sun. af. Tri.	20	31	II	13	18	☐ ☽ ☾ 8. p. moist	16	40
4	d		21	31		26	19		16	42
5	c		22	31	☽	8	20	cold rain	16	44
6	f	Faith	23	30		20	21	☽ ☽ ☾ 1. a. very	16	46
7	g	Marcellus	24	30	☾	3	22	☐ ☽ ☾ 4. a. tem-	16	48
8	a		25	30		14	23	perate and	16	50
9	b	Dennis	26	3		26	24	☐ ☽ ☾ 10. a.	16	52
10		18 Sun. af. Tri.	27	30	☾	8	25	good weather	16	54
11	d		28	29		10	26	☽ ☽ ☾ 5. p. more	16	56
12	s		29	29	☾	2	27	im. imper te	16	58
13		Edward Conf.	29			14	28	☐ ☽ ☾ 2. p. while	17	0
14	s		1	29		27	●	clustering	17	2
15	a	Wolfrane	2	29	m	10	1	wind and	17	4
16	b	Lucian	3	30		23	2	☐ ☽ ☾ 5. a. Rain	17	6
19		19 Sun. af. Trin.	4	30	☽	6	3	☽ ☽ ☾ 10. a.	17	8
17	d		5	30		19	4	close air	17	10
18	e	Ptolomy	6	30	☾	3	5	☐ ☽ ☾ 1. a.	17	12
20	f		7	30		17	6	☽ ☽ ☾ 10. a.	17	14
21	g	11000 Virgins	8	31	☾	1	7	wry weather	17	15
22	a		9	31		14	8	☽ h ☾ 7. p.	17	17
23	b		10	31		29	9		17	19
24		20 Sun. af. Trin	11	31	☾	13	10	☐ ☽ ☾ 1. p.	17	20
25	d	Crispian.	2	32		27	11	☽ ☽ ☾ 7. p.	17	21
26	e		13	32	☾	12	12	dark clow-	17	24
27	f		14	32		26	13	ly and in-	17	26
28	g		15	33	☾	10		imperate	17	28
29	a		16	34		24	14	☐ h ☾ 3. a. wind	17	30
30	b	Theonestus.	17	34	II	7	16	☽ ☽ ☾ 5. p.	17	32
31		21 Sun. af. Tri.	18	35		21	17		17	34

The
planets
places

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November 15 1688

- ☾ Last Quarter the 5 day, 55 min. past 2 afternoon.
- New Moon the 13 day, 38 min. past 12 at noon.
- ☾ First Quarter the 20 day 10 min. past 10 before noon
- Full Moon the 27 day, 9 min. after 12 at noon.

1	D		19	34	♂	4	18	☐ ♂ ☾ 3 p. wet
2	e	All Souls	20	36		16	19	☐ ♀ ☾ 10 a. and
3	f		21	37		28	20	☐ ☾ for several
4	g		22	37	♂	10	21	☐ ☾ rises.
5	a		23	38		22	22	☐ ☾ 6 a
6	b	Leonard	24	39	☐	4	23	☐ ☾ like
7	c	22 Sus. Trin.	25	4		16	24	☐ ♀ ☾ 1 p. dry
8	D		26	40		28	25	☐ ♀ ☾ 8 p. and
9	e		27	41	♂	10	26	☐ ♀ ☾ 9 p. frosty
10	f		28	42		22	27	☐ ☾ more open
11	g	Martin	29	43	m	5	28	☐ ☾ air and rain
12	a		44			18	29	☐ ☾ 3 p. or
13	b	Brice	1	45	♂	1	30	☐ ☾ frost
14	c	23 Sus. Trin.	2	46		15	2	☐ ♀ ☾ at noon
15	D		3	46		29	3	☐ ☾ dry but windy
16	e	Edmund	4	47	☐	13	4	☐ ☾ 2 a
17	f	Hugh	5	48		27	5	☐ ☾ very tem-
18	g		6	49	☐	11	6	☐ ☾ p rain
19	a		7	50		26	7	☐ ☾ 2 a. but
20	b	Edmund	8	51	♂	11	8	☐ ☾ some
21	c	24 Sus. Trin.	9	52		24	9	☐ ☾ rain
22	D		10	54	☐	8	10	☐ ☾ 10 p.
23	e	Clement	11	55		22	11	☐ ☾ 7 a.
24	f		12	56	♂	1	12	☐ ☾ at and
25	g	Katherine	13	57		19	3	☐ ☾ 12 a
26	a		14	58	II	3	14	☐ ☾ 10 a. at
27	b		15	59		15	15	☐ ☾ weather, the
28	c		17	1		29	16	☐ ☾ reason consider
29	D		18	2	♂	12	17	☐ ☾ 3 p. ed
30	e		19	3		24	18	☐ ♀ ☾ 9 p.

The
Planets
places

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		d.	m. d.			m. d.	m. d.			
The Planets places	1	19	7	15	17	23	23	22	12	34
	6	19	18	15	R 48	18	29	35	15	46
	11	19	32	14	46	11	33	5	16	41
	16	19	48	14	25	14	38	11	46	13
	21	20	7	14	1	7	41	17	50	6
	26	20	27	13	30	20	45	23	55	1
	7	34	5							5
	7	36	5	3	Lambert advanced towards G. Monk,					10
	7	38	5	the long Parliament began,					29	7
	7	39	5	Gunpowder Treason					7	48
	7	40	5						64	8
	7	42	5						9	24
	7	43	5						10	11
	7	45	5						11	0
	7	46	5						11	48
	10	7	48	5						12
	11	7	49	5	K. Ch. the 1. to the Isle of Wight,					22
	12	7	50	5	Brainford Fight,					29
	13	7	52	5						3
	17	7	53	5						3
	15	7	55	5						4
	16	7	56	5	An Alarm in London,					27
	17	7	57	5						6
	18	7	58	5						7
	19	7	59	5	K. Cha. 1. born at Dunfermling in S.					69
	10	8	0	4						8
	11	8	1	4						9
	22	8	2	4						10
	23	8	3	4	Cromwells Funeral,					11
	24	8	4	4						11
	25	8	5	4						12
	26	8	6	4	Common-prayer voted down,					25
	27	8	6	4	Personal Treaty dissolved,					21
	28	8	7	4						3
	29	8	8	4	King returned to Oxon,					27
	30	8	9	4						4

December hith: XXXI. dayes.

- ☾ Last Quarter the 5 day, at 1 in the afternoon.
 ☉ New Moon the 13 day, 43 min. past 1 in morn.
 ☾ First Quart. the 19 day, 11 min. past 7 at night.
 ☉ Full Moon the 27 day, 45 min. past 4 morn.

1	f	Eligius	20	4	♊	6	19	Snow
2	g		21	5		18	20	♂ ♀ 5. p.
3	g	Barbara	22	7	♊	1	21	☐ ♀ 3. p.
4	b	Osmond	23	8		12	22	rain and
5	☉	1 Sun. in Adv.	24	9		24	23	flect
6	d		25	11	☐	6	24	
7	e		26	12		18	25	☐ ♀ 1. a. moist
8	f	Concep. Mary	27	13	♊	1	26	♂ ♀ 8. a. vari-
9	g	Ciprian	28	14		13	27	☐ ♀ 5. a. able
10	a		29	16		26	28	☐ ♀ 4. a. cloudy
11	b			17	♊	10	29	♂ ♀ 2. a.
12	d	Paul Bish.		18		24	30	dry weather
13	e	Lucy:	1	20	♊	8	☉	♂ ♀ 6. p. for
14	f		3	21		22	1	several dayes
15	g	Valerius	4	22	☐	7	2	☐ ♀ 4. a.
16	a		5	24		22	3	♂ ♀ 5. a.
17	b		6	25	♊	6	4	
18	b	Victor	7	26		20	5	☐ ♀ 6. a.
19	☉	4 Sun. in Adv.	8	28	♊	5	6	☐ ♀ 10. p.
20	d		9	29		18	7	
21	e		10	30	♊	1	8	
22	f	30 Martyrs	11	32		15	9	wind, rain
23	g	Victoria vir.	12	33		29	11	☐ ♀ 1. a. and
24	a	40 Virgins	13	34	♊	12	10	few
25	b		14	36		25	12	moist and
26	☉		15	37	☐	8	13	♂ ♀ 4 p. cloffe
27	d		16	38		20		are
28	e		17	39	♊	2	15	variable
29	f	Tho. Becker	18	41		14	16	☐ ♀ 4. a. cloffe
30	g		19	43		26	17	♂ ♀ 6. a. and
31	a	Silvester	20	43	♊	8	18	moist.

The
Plane
place.

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d.	m.d.	d.	m.d.	d.	m.d.	d.	m.d.	d.	m.d.	d.	m.d.	d.	m.d.	d.	m.d.	
<i>The Planets places</i>																
1	20	49	1	55	3	48	9	5	0	7	5	5	6			
6	21	14	12	12	26	50	5	55	3	39	2	M				
11	21	40	11	40	19	53	11	53	8	36	3	M				
16	22	8	11	1	2	52	17	50	14	43	4	D				
21	23	38	1	21	5	52	23	41	11	27	0	S				
26	23	8	9	40	8	5	29	32	28	35	4					
1	8	10	4	K. Charles I. to Hurst Castle,								21	5	24		
2	8	11	4									9	12			
3	8	12	4	Earl of Peterborough to Tangiere								8	7			
4	8	12	4									7	48			
5	8	13	4									8	36			
6	8	13	4									9	24			
7	8	13	4	Members imprisoned and secluded.								21	10	12		
8	8	13	4									11				
9	8	13	4									11	48			
10	8	13	4									12	36			
11	8	13	4									1	4			
12	8	13	4									2	12			
13	8	13	4									3	48			
14	8	13	4									4	36			
15	8	13	4									5	24			
16	8	13	4	The Fleet under Gener. Pen. set sail for								6	12			
17	8	12	4	Hispaniola								15	7			
18	8	11	4									7	48			
19	8	10	4	O. Cromwel proclaimed Protector								16	8	36		
20	8	9	4									9	24			
21	8	8	4									10	12			
22	8	7	4	Geor. Philips, Tho. Tongue, Nat. Gibs, &								11				
23	8	6	4	Fran. Stubbs, executed for treason								11	48			
24	8	5	4	Jam. Hind. & John Cellers reprieved								12	36			
25	8	5	4	23) Sir Alex. Carew beheaded								25	1	24		
26	8	4	4	A lamentable fire in Loarbbury								7	2	1		
27	8	4	4									3				
28	8	3	4	Major Pitcher shot to death								21	3	48		
29	8	3	4	C. Borleigh beat up drums in the Isle of								4	3			
30	8	2	4	17 gdt.								22	5	24		
31	8	2	4									6	1			

The Dominion of the Moon in Mans

Body as she passeth under the 12
Zodiacal Constellations.



The eager Ram rules both the Head and Face,
The Neck and Throat is fatten Taurus's place.
Resembling-Twins the Arms and Shoulders guide;
The slow-pac'd Crab, the Breast, the Spleen, and Side.
The Heart and Back's the Gen'rous Lion's share;
The bashful Maid of Bow'ls and Belly takes care.
To the fast Ballance, Reins and i oynes belong;
The Secret's govern'd by the Scorpion.
The Ivory Thighs the Archer doth effect;
The Goat our complemental Knees protect.
The nimble Legs i' Aquarius lot doth fall;
The active Feet to Pisces: And there's all.

♄ Saturn, ♃ Jupiter, ♂ Mars, ☉ Sol, ♀ Venus
☿ Mercury, ☾ Luna.

♊ Conjunction, ☾ Opposition, ☐ Quartile,
△ Trine, ✕ Sextile.

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BOWKER, 1669.

Of Eclipses.

THere will be two *Solar Eclipses* this year, the one upon the 20th. of *April*, 24 min. past 5 in the Morning, which will not be seen of us, but will be conspicuous and terrible to behold by the Inhabitants of *East-India*---

The other *solar Eclipse* happneth upon the 14th. of *October*, 24 min. past 9 at night, but (because neither of them will be visible to us) I shall therefore say no more of them in this place.

For *Eclipses, Luminarum maxime agunt in illas Regiones, quæ sunt sub Signo Ecliptico*. The effects of *Eclipses* are most predominant in those Regions and Cities which are under the *Eclipsed Sign*; and in such places where they are visible. For *Nul nocet Eclipsis illis Regionibus in quibus non videtur*.

But although there will be no *Eclipse* visible to us this year, yet the two *Eclipses* which were conspicuous to us the last year, will this begin to operate; As that of the *Moon*, will begin to send forth the effects of her Influence upon the 24th. of *April*, and will so continue operating till the 23th. of *August* this year: All which time you may expect to participate of the events thereof, according as the last year, I published concerning it. — And the effects of the *Eclipse* of the *Sun* begins to operate this year upon the 16th. of *May*, so continuing from that time all this and the next year, more or less sending forth its influence upon those Inhabitants who live under the *Eclipsed Signe*: To those to whom the *Eclipse* was visible; And, upon such persons whose *Nativities* agree with the *Eclipse*: *England* and the adjacent Nations are not exempt, but will participate of their events, according to the Judgment I delivered of them in my last.

C

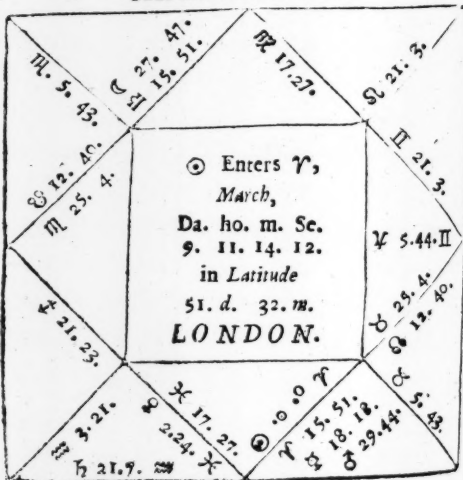
of

Barker, 1669.

Of the Suns Ingress into Aries.

There being no Eclipse of either Luminary, from whence any considerable judgment may be given, concerning the state and condition of this present year, I will therefore have recourse to the position of the Heavens at the time of the Suns entrance into the Equinoctial Sign Aries, and deduce my judgment therefrom, not neglecting to make enquire into the situation of the Planets, in the Figures erected for the times of the Præventional Full Moon, and Postrentional New Moon, but taking all three together, (according to the Doctrine prescribed to us by Ptolomy, lib. 2. cap. 9. *Quadr.* in that behalf) and making some farther scrutiny into the state and position of the Heavens at the respective times of the Suns entrance into the other three Cardinal Points, deliver my judgment concerning the state of this year briefly as followeth.

The Position of the Heavens at the time of the
Suns entrance into Aries.



Bowker, 1669.

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In this Figure Mercury is principal Ruler, he having 14 clear testimonies of Strength and Fortitude : But Mars shares with him in his Dominion, he having eleven Fortitudes : The rest of the Planets have either no dignities in the places here to be regarded, or else debilities equal to, or surmounting their number of Fortitudes ; from whence we may gather ♂ and ♀ to be sharers in this Revolution.

The Sign ascending at the time of this Ingress, is m, a fixed Sign, wherefore, according to Guido Bonatus, Part 4. cap. 24. *Quando introitu Solis in Arietem, fuerit Ascendens Signum Fixum, continet enim Revol. in se omnes quartas illius Anni, & sic qui fuerit tunc Dominus Anni erit dominus totius Anni, & totius Revolutionis illius.* When, at the Sun's entrance into Aries, if the Sign Ascending shall be a fixed Sign, that Revolution comprehendeth in it self all the four quarters of that year ; and so he that shall then be found Lord, shall be Lord of the whole year, and of that whole Revolution.

Mars therefore and Mercury being chief Rulers in this Revolution, we may expect immoderate heats ; scorching the Fruits of the Earth. hot Winds and Tempests Haile, Lightning, &c. House-Burnings, Tempests at Sea, Shipwracks, and the like Calamities : The engendering of hot and dry Diseases ; as Feavers. Irruptions of the Blood, Inflammations, &c. — From the power and strength that ♂ hath in the Revolution, Mars may be expected ; and especially at Sea, and by his Position in the Figure, the Souldiery will be very successful and prosperous, performing many notable Exploits against the Enemy ; and for so doing, shall be had in great esteem.



A SHORT
INTRODUCTION
 TO
 ASTRONOMY, COSMOGRAPHY,
 AND GEOGRAPHY:

Being a brief Description of the *Sphere*,
 or *Globe*, Declaring the *Names*, *Properties*, and
Uses of such Imaginary *Circles*, *Lines* and *Points*,
 as are in the Heavens; Shewing how they
 bound and limit *Times* and *Seasons*, to the Inha-
 bitants of the whole World.— With the *De-*
finitions of several Terms used in *Astronomy*, and
 often made use of in this *Kalender* and others,
 which are not generally understood or known
 to the Vulgar.

IT was my promise the last Year, (when I first entered
 upon this task) Annually to present you with some-
 thing *Astronomical*, as Introductive to that Science;
 And that I may both gradually and methodically proceed
 therein, I have made choice of these following *Spherical*
Elements, as being absolutely necessary first to be known.

I. Of the Sphere or Globe.

Theodosius, an ancient and learned *Mathematician*, who
 writ much of the *Sphaericks*, thus defineth a Sphere or
 Globe. *Sphæra est solidum, una superficie contentum, in*
cujus medio punctum est, a quo omnes rectæ lineæ ductæ ad,
superficiem ambitentem sunt æquales. That is, a Sphere or
 Globe is a solid body containing one Superficies; in whose
 middle there is a point from which all right lines drawn
 to the Superficies are equal. Upon

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Bowker, 1669.

Upon the Superficies of this *Sphear* or *Globe* are described several *Circles* and *Points*, (which are only imagined in the *Heavens*) thereby the better to inform the fancy for by them (in the *Celestial Globe*) the several *Constellations* of the *Fixed Stars* are limited, and their situation denominated: And the same *Circles* described upon the *Terrestrial Globe* do confine and bound the *Zones* and *Climates*.

These *Imaginary Circles* are in number *Ten*; of which, *Six* are called *Great Circles*, and *Four* are *Lesser Circles*: Those *Circles* are called *Great Circles*, which being drawn upon the *Globe*, do divide the *Superficies* thereof into two equal parts; and those are called *Lesser Circles*, which divide the *Superficies* of the *Globe* unequally.

II. Of the Circles of the Sphear.

Every of the forementioned *Circles* hath a peculiar name attributed unto it; and the names of

The six great Circles, are these:

- | | | |
|-----------------------------|-----|---------------------------|
| 1. The <i>Horizon</i> . | } { | 4. The <i>Zodiac</i> . |
| 2. The <i>Meridian</i> . | | 5. } The <i>Colures</i> . |
| 3. The <i>Æquinoctial</i> . | | 6. } |

Of these two *Colures*, the one is called the *Æquinoctial Colure*, dividing the *Sphere* into two equal parts in the points of *East* and *West*, and the other is called the *Solstitial Colure*, equally dividing the *Sphear* into two equal parts in the Points of *North* and *South*: So that these two *Colures* crossing one another at right Angles in the *Poles* of the *World*, do divide the *Globe* into four equal *Quarters*.

The four lesser Circles are,

1. The *Tropic of Cancer*; Or the *Northern Tropic*.
2. The *Tropic of Capricorn*; Or the *Southern Tropic*.
3. The *Circle Arctic*, Or the *North Polar Circle*.
4. The *Circle Antarctic*; Or the *South Polar Circle*.

Besides these *Circles*, there are upon the *Superficies* of the *Globe*, other *Points* and *Lines* of special note and use, As

1. The two *Poles* of the *World*, { *North*,
and
South.

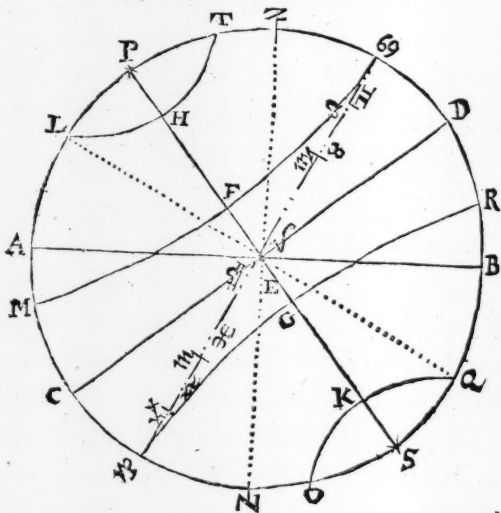
Bowker, 1669.

2. { The Zenith, }
3. { The Nadir, } Or point in the Heav. { Over our Heads;
 { Under our Feet.
4. The Poles of the Ecliptique.
5. The Ecliptique Line. or *Via Solis*. And
6. There is another imaginary Line supposed to pass

8. There is another imaginary Line supposed to pass from Pole to Pole, through the body of the Globe; and this Line is called the *Axis of the World*, for that the motion of the Heavens is wholly upon the Poles of the World.

Having thus given you the Names of the several *Circles, Lines, and Points*, which are in the Heavens imagined, I will give you a demonstrative Figure, by which you may easily conceive how they are drawn upon the *Globe*.

A Figure of the Sphear or Globe.



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III. Of the Use and Office of these Circles, Points, and Lines: And

I. Of the HORIZON.

The *Horizon* is a great Circle of the Sphear, dividing the visible part of the Heavens from the not visible, that is, the lower Hemi-Sphear from the higher: As suppose you were at Sea, or upon a high Hill upon the Land, and looking round about you, you imagine that the *Skie* and *Water*, or the *Skie* and the *Earth* did meet and touch each other. Now this line of Separation of the *Skie* and *Water*, or *Earth*, is the visible *Horizon*, and is that which is imagined to be in the Heavens. This Circle in the Figure is represented by the line A B, which divideth the Sphear into two Hemispheres, viz. the upper Hemisphere A Z B, which we see, and A N B, that which we do not see.

Unto this Circle, when either the *Sun*, *Moon*, *Stars*, or any of the *Planets* do come on the East part of the Heavens, they are then said to rise; and when any of them come to this line on the West part of the Heavens, then the *Sun*, or such a *Star* or *Planet* is said to set; So that the *Rising* and *Setting* of the *Sun*, *Moon*, and *Stars*, are limited and bounded by this Circle.

2. Of the MERIDIAN.

The *Meridian* is a great Circle of the Sphear, which passeth through the *Zenith* and *Nadir* Points, and also through both the *Poles*, and divideth the *Horizon* into two equal parts in the points of *North* and *South*: This Circle is in the Figure represented by the outermost Circle, noted with A Z B N, which passeth through Z the *Zenith*, (or point in the Heavens, which is directly over your head, in what part of the World soever you are) and N the *Nadir*, (which is the point directly under your feet, and opposite to the *Zenith*) and it also crosseth or divideth the *Horizon* in A the *North* point thereof, and in B the *South* point.

Unto this Circle when the *Sun*, *Moon*, or any other *Star* or *Planet* cometh, it is said to be upon the *Meridian*, or at the highest it can be that day or night; so that when the

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Sun riseth towards the East in the morning, it ascendeth higher and higher, till it cometh to this Circle, and then it is noon, after which it descendeth lower and lower, till it set in the evening in the West part of the Horizon.

3. Of the AEQUINOCTIAL.

The *Aequinoctial* is a great Circle, dividing the Sphear into two equal parts, and passeth through the East and West points of the *Horizon*, and also through the *Meridian* in two points, which are so far distant from the *Zenith* and *Nadir* points, as the *Poles* are distant from the *Horizon*: So that the *Axis of the World*, which passeth from *Pole* to *Pole*, cutteth this Circle at right Angles. This Circle is represented in the Figure by the line CD, the North Pole by the letter P, and the South Pole by the letter S.

Unto this Circle, when the Sun cometh (which is twice every year, namely, about the 10th. of *March*, and the 12th. of *September*) it maketh the *dayes* and *nights* of equal length through the whole *World*; for that at that time the Sun riseth due East, and sets due West; which at no other times of the year it doth, but rises and sets Northward of the East or West points, from the 10th. of *March* to the 12th. of *September*, and Southward of the East or West from the 12th. of *September* to the 10th. of *March* again.

4. Of the ZODIACK.

The *Zodiack* is a great Circle, dividing the Sphear or Globe into two equal parts, in the East and West points of the *Horizon*, and cutteth both the *Horizon* and *Aequinoctial* at oblique Angles; for it cuts the *Horizon* at an angle equal to the Sun's greatest *Meridian Altitude*, in any *Latitude* and the *Aequinoctial* at an angle equal to the Sun's greatest *Declination*. This Circle is called by some The *Girdle of the World*, it having Embroidered (as it were) upon it, the Figures of the 12 *Celestial Signes*. — This Circle

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Circle cannot well be expressed in this Figure, for that it consists of some breadth, in which the latitudes of the Planets are counted: But through the middle thereof, there is a line, which is called *the Ecliptick Line*; or *Via Solis*, for that the Sun in his Motion never deviates from this line (though the other Planets do more or less) and this line (or rather Circle) is represented in the Figure by the line ϖ E S, and hath on the Northern side thereof, (which is between E, and S) the Characters of the six Northern Signs γ δ Π ζ Ω Υ , limiting or bounding the *Spring* and *Summer*; And on the South-side the six Southern Signs; \cap ♋ ♌ ϖ ♍ ♎ , by them limiting *Autumn* and *Winter*. The Poles of this Circle are upon the *Meridian*, so far distant from the Poles of the *World*: as is the Sun's greatest Declination, and are noted in the Figure by the Letters L and Q.

5. And 6. Of the two COLURES.

The two *Colures* are two great Circles, passing through the *Poles* of the *World*, and there cutting each other at right Angles. The one of these *Colures* cutteth the *Ecliptick Line* in the points of γ and \cap , and is called *The Equinoctial Colure*; The other cutteth the *Ecliptick* in the points of S and ϖ , and is called *The Solstitial Colure*. — In the Figure the *Equinoctial Colure* is represented by the line P S, and the *Solstitial Colure* is the same with the *Meridian*, as the *Sphere* is here drawn.

When the Sun is in that Sign or Point of the *Ecliptick*, which meeteth with the *Equinoctial Colure*, which is in the first scruples of γ or \cap , then are the *dayes* and *nights* equal: But when the Sun cometh to those Points of the *Ecliptick*, which are cut by the *Solstitial Colure*, which are in the beginning of S and ϖ ; then the Sun being in S maketh the longest day to all the Northern, and the shortest day to all the Southern Inhabitants of the *World*: And being in *Capricorn*, it maketh the shortest

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est day to the Northern; and the longest to the Southern Inhabitants.

Of the Four lesser Circles.

1. Of the TROPICK of CANCER.

The *Tropick of Cancer* is a Circle drawn upon the Superficies of the Globe parallel; or equidistant from the *Æquinoctial*, on the North side thereof at 23 degrees, 31 minutes distance therefrom, which is equal to the Suns greatest Declination, and also to the obliquity of the *Ecliptick Line*: It is also called the *Northern Tropick*; for that it lieth on the North side of the *Æquinoctial*, towards the *North Pole*.

2. Of the TROPICK of CAPRICORN.

The *Tropick of Capricorn* is a Circle drawn on the Superficies of the Globe, parallel to the *Æquinoctial*, on the South side; as the same distance of 23 degrees, 31 min. as the *Tropick of Cancer* was on the North side; It is called the *Southern Tropick*, because it lieth on the South side of the *Æquinoctial*, and towards the *South Pole*.— In the Figure, the *Tropick of Cancer* is described by the crooked line M F S, and the *Tropick of Capricorn* by the line w G R,

The *Tropick of Cancer* cutteth the *Meridian* in that point where the *Ecliptick* cutteth it, that is in the point S, on the South part of the *Meridian*: And the *Tropick of Capricorn* intersects the *Meridian* on the North part thereof; in the point w. So that these two lesser Circles, do bound and limit the *Suns course*; for the Sun in his motion through the signs of the *Zodiack*, never exceedeth these bounds or limits; for the Sun being in γ , he ascends upwards to δ and Π , and so to S making the *Spring quarter*; and being thus at his utmost limits, he then descends downwords from S to α , and \mathcal{M} and so to ω , making the *Summer quarter*: Having thus made his progress through the six Northern Signs, he begins to take his journey Southwards,

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So being in ∞ , he descends downwards to m and τ , and so to ν , where he is at his greatest remotion Southward; in which progress he maketh the *Autumnal Quarter*, and being stoped by the *Tropick of Capricorn* from going any farther Southward, he returns from ν , to ∞ and π , and so to γ again, where he began his Race; and in this his last Progress, from ν to γ he createth the *Winter Quarter*.

3. And 4. Of the Circles ARTICK and ANTARTICK.

These are two small Circles drawn about the Poles of the World, parallel or equidistant to the *Æquinoctial* and *Tropicks*; and the Circle *Artick* is so far distant from the *North Pole* as the *Tropick of ♄* is from the *Æquinoctial*; and the *Antartick* is at the same distance from the *South Pole*.— In the Figure, the *Artick Circle* is noted with the letters *L H T*, and the *Antartick* with *O K Q*.

In these two Circles are the two *Poles* of the *Ecliptick*; from whence, towards either of these *Poles*, the *Latitude* of the Stars and Planets are counted.

In the Figure, there are two Lines, of which I have given you no account; the one is the line *Z N*, which represents the Circle of *East* and *West*, and is often called the *Prime Vertical*, or *chief House-Circle*; because when the Sun cometh to touch this circle at any time of the year, in the Morning he is *due East*, and in the afternoon *due West*, which is not at 6 of the clock, (as most conceive) but it is *Spring*, and in *Summer* always there before 6 at night; and when the dayes are at the longest, it is there about 4 in the Afternoon, and cometh not to it in the Morning till about 8 a clock: And in *Autumn* and *Winter* it cometh not so far Northward as to touch it at all; so that that half of the year, the Sun never comes to the true *East* or *West* points of the Heavens, but rises and sets Southerly of them.

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The other Line is that in the Figure noted with L Q, and represents the *Axis of the Ecliptick*, upon which the Latitudes of the Stars and Planets are reckoned.

¶ Thus have you a brief (but plain) Description of all the principal Circles, Lines and Points which appertain to a Material Sphear or Globe: But if you have not a Sphear or Globe to inform your fancy, and that you cannot understand by what is before delivered; you may suppose the Figure before going to be blown up like a Bladder, and your self to be standing within the same at the Point E, and then will all those which are streight lines in the Figure, appear to be Circles round about you, by which you will far easier conceive the order of their Position or Situation in the Heavens, than you can by the Figure here as it is described in Plano.

Of the variety of *Seasons and Shaddows*; and diversity of *Dayes and Nights*, which the severall Inhabitants of the World have in respect of their *Latitude*, as being situate, either under, or between some of those Circles of the Sphear before described.

BY the former dividing of the Sphear or Globe by Circles, you may easily conceive, that all the Inhabitants of the Earth must live either directly under some one of those Circles, or between two of them, and as they are situate in respect of their *Latitude* (for it is the alteration thereof that maketh this diversity) so do their *seasons and Shaddows* vary. Of which diversity; I will here give you an account, by declaring from the Sphear what kind of *seasons and Shaddows*, diversity of *dayes and nights*, the Inhabitants living under or between any of the Circles have. And

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I. Of those who live directly under the *Æquinoctial* Circle, and have the Axis of the World for their Horizon.

Those whose Zenith is in the *Æquinoctial*, have in one year two Summers; which one extream hot, for the Sun twice in the year passeth directly over their heads; which is, when the Sun is in γ and π : They have also two Winters, the one when the Sun is in δ , the other when he is in ν . but these Winters are extream hot, for that their least Meridian Altitude is 66 deg. 30 min. whereas our greatest here at London is but 62 deg. By what hath been said, it appeareth, that our two seasons of Spring and Autumn, are to them two summers, and our summer and winter are to them two winters.— These Inhabitants have four diversities of shadows, for when the Sun is in the *Æquinoctial*, then in the morning they cast their shadow towards the West, and in the afternoon towards the East; and at noon their shadow is directly down under their feet. Also when the Sun is in the Northern signs, their shadow is cast towards the South; and when in Southern signs, it is cast towards the North.— Their day is always 12 hours long, they dwelling in a Right sphere; by means whereof, they have a benefit and priviledge above all the Inhabitants of the World besides, for they can see both the North and South Poles; and the stars about them, yea, they may see all the stars in the Firmament to rise and set, which no Inhabitants but themselves can.

II. Of those Inhabitants which dwell between the *Æquinoctial* and Tropick of Cancer.

These Inhabitants also have the sun pass over their heads twice in the year, and those times are when the suns Declination is equal to their Latitude: So their Latitude being 11 deg. 31 min. the sun hath such Declination North about the 9th. of April, on which day the sun passeth

passeth directly over their heads.— They have two *Summers* and two *Winters* and four variety of *shadows* as those under the *Aequinoſtial*.

III. Of those who live directly under the Tropick of Cancer.

Those who have their Zenith in the Tropick of Cancer, have the sun only once in the year pass over their heads; and that is about the 10th. of June, when the sun is in ♋: They have three diversity of *shadows*; for in the Morning the shadow is cast towards the West, in the Evening towards the East, but at Noon it is perpendicular.

IV. Of those who live between the Tropick of Cancer and the Circle Arctick.

The Inhabitants of this part (which is the most habitable part) of the World, never have the sun pass over their heads; and in this part of the World do we Inhabit.— Their *shadows* are of three kinds; in the Morning it is cast Westward, at Noon to the North, and at Night it is cast Eastward.— They have four seasons, viz. *Spring*, *Summer*, *Autumn* and *Winter*.

V. Of those who live directly under the Circle Arctick.

Those that have their Zenith in the Arctick Circle, have the Pole of the Ecliptick for their Zenith; and the Ecliptick it self for their Horizon; and being the Ecliptick is their Horizon, the Tropick of Cancer is all of it above their Horizon, and the Tropick of Capricorn all below their Horizon: So the sun being in the beginning of Cancer, their Artificial day is 24 hours long, and their night is but a moment; for in an instant, the sun toucheth and passeth the very verg of the Horizon, and forthwith begins to ascend again from the North part of the *Aſeridian* towards the East.

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Bowker, 1669.

VI. Of those who dwell between the Artick Circle and the North Pole.

Those that Inhabit this part of the World, their *Horizon* cutteth the *Zodiack* in two points, equally distant from the beginning of *Cancer*; by which means it happeneth, that this portion of the *Zodiack* intercepted, always remains above their *Horizon*; so that while the sun is in that part of the *Zodiack*, they have continual day, and no night: Thus, if this intercepted arch be one sign, then is their day a moneth long; if two signs, then is it two moneths long, &c. — On the contrary, that portion of the *Zodiac* intercepted between those two points equidistant from the beginning of *Capricorn*, is always below the *Horizon*, and according to the quantity of lines that the Arch intercepteth containeth, so long have they continual night. — The other signs which do rise and set to them, do rise and set preposterously, as δ before γ , γ before κ , κ before π , &c. — But the signs opposite to these do rise in order, and set preposterously; as m before π , π before m , &c. yet the signs opposite to these do set direct.

VII. Of those which dwell directly under the Pole Artick.

The Inhabitants of this part of the World (if there be any) having the Pole for their Zenith, have the *Equinoctial* for their *Horizon*, and one half of the *Zodiack* is always above and the other half always below their *Horizon*: now during the time that the sun resides in that half of the *Zodiack* which is above their *Horizon*, which is from his entrance into γ , to his entrance into π (which is from the 10th. of our *March*, till the 12th. of our *September*) they have continual day, and no night; and the other half of the year, during the suns passing from the beginning of π , to his entrance into γ , (which is from our

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our 12th. of September to the 10th. of March) they have continual night ; yet in all this time, the sun never is above 23 deg. 31 min. below their *Horizon*, which rendereth it not quite dark all that time ; for as it approacheth nearer to the *Æquinoctial*, the light increaseth ; till bel come thither, it riseth to them : But when it is above the *Horizon*, at the highest it is but 23 deg. 31 min. and therefore must needs render the Climate to be very cold that it is very questionable whether there be any Inhabitants there or not.

¶ Thus you have an account of the diversity of Dayes and Nights, Seasons and Shadows, that the several Inhabitants of this Terrestrial Ball enjoy, and those Examples which I have here given, are all between the *Æquinoctial* and the North Pole ; yet you are to understand the same in all respects of those Inhabitants, that are so posited between the *Æquinoctial* and the South Pole ; only remember to call East West, North or Northerly, South or Southerly.— Winter Sommer.— Spring Autumn.— Day Night, Night Day, &c.

I should now according to my promise at the beginning of these *Astronomical Elements*, proceed to give you the Definition and Explanation of divers terms used in *Astronomy*, *Cosmography* and *Geography* ; but I see that I have already exceeded the bounds of an *Almanack*, wherefore I must refer them to the next : and to this years Labour put

AN END.

